



UNITED STATES PATENT AND TRADEMARK OFFICE

KX
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,489	05/07/2001	Magnus Fagrell	0459-0601P	8854
2292	7590	04/23/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			QUAN, ELIZABETH S	
			ART UNIT	PAPER NUMBER

1743

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/849,489	Applicant(s) FAGRELL ET AL.	
	Examiner Elizabeth Quan	Art Unit 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) 12, 13 and 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-13 and 17-19 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Information Disclosure Statement

1. Applicant is reminded that the IDS that was filed most recently as indicated on the file wrapper is not present in the file. Applicant is invited to file the IDS and associated prior art.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 1-11 are rendered indefinite by the recurrence of superscripts and subscripts the meaning of which are unknown. For example, why does ^{MN}δ have an extra superscript M? Is there significance between R chemical reactions and R sets of reaction parameters? Is there significance in denoting chemical substances A_R with subscript R? It appears superscript N of chemical species and their functionalities is denoting the chemical species and their functionalities in reference to the database and superscript X of chemical species and their functionalities is denoting the chemical species and their functionalities when not referring to the database. Why is it then the reaction parameters are denoted by superscript X when it appears to be referring to the database? Why is the reaction parameter sometimes without superscript?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1743

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/15825 to Nova et al.

Nova et al. disclose a method of conducting multiple chemical reactions in a system with an apparatus, which provides energy for the chemical reactions (PAGE 11, line 24-PAGE 13, line 7; PAGE 53, line 1-PAGE 54, line 21; PAGE 70, line 7-PAGE 95, line 31). The system includes a parameter selecting unit with a user interface and storage means with a database (PAGE 11, line 24-PAGE 13, line 7; PAGE 53, line 1-PAGE 54, line 21; PAGE 70, line 7-PAGE 95, line 31). The chemical reaction involves the transformation of one or more chemical species XB with one or more functionalities β into a reaction product XD with one or more functionalities δ under the influence of one or more corresponding chemical substances A_R with one or more functionalities α_R , which is involved in transforming one or more functionalities β of the one or more chemical species XB into one or more functionalities δ of the reaction product XD (PAGE 11, line 24-PAGE 13, line 7; PAGE 53, line 1-PAGE 54, line 21; PAGE 70, line 7-PAGE 95, line 31). The database has N sets of data each of which is directed to a set of reaction parameters and pertinent information for a particular chemical reaction involving the transformation of one or more functionalities ${}^N\beta$ of the one or more chemical species NB into one or more functionalities ${}^{MN}\delta$ of the reaction product ND (PAGE 11, line 24-PAGE 13, line 7; PAGE 53, line 1-PAGE 54, line 21; PAGE 70, line 7-PAGE 95, line 31). Each of the N sets of may include information on the structure and molecular weight of the chemical specie(s) of interest, reaction steps, pre-reaction procedures, and reaction work-up procedures (PAGE 11,

Art Unit: 1743

line 24-PAGE 13, line 7; PAGE 53, line 1-PAGE 54, line 21; PAGE 70, line 7-PAGE 95, line 31).

The system by which chemical reactions are performed operates interactively. The user providing information to the user interface of the parameter selection unit about chemical species ^xB of which one or more functionalities β is part of, such that providing information about chemical species ^xB would also be providing information about the one or more functionalities β in the process (PAGE 74, line 28-PAGE 75, line 2). The user also provides to the user interface of the parameter selection unit the desired transformation of chemical species ^xB of which one or more functionalities β is part of into reaction product ^xD of which one or more functionalities δ is part of, such that providing information about the transformation of ^xB to ^xD would also be providing the transformation of β to δ in the process (PAGE 74, line 28-PAGE 76, line 5). The user not only selects the chemical species but may also specify the number of synthesis steps, procedural information, such as reaction times, temperatures, molarities, reagents, and other pre-procedure and work-up procedure information (PAGE 75, line 3-PAGE 77, line 16). After the user provides information to the interface, the parameter selection unit retrieves and displays the data at appropriate times during the synthesis (PAGE 75, line 31-PAGE 77, line 16). The parameter selection unit controls the sorting process by identifying the memory in the matrix of a matrix-with-memory, seeking the identification of the memory in the database, and taking appropriate measures depending on the identity of the memory (PAGE 76, lines 15-32). The parameter selection unit guides the user during the synthesis process, such that an array of reaction mixtures each comprising a predetermined amount of chemical substances A_R and chemical species ^xB is prepared and treated according to the sets of reaction parameters. The

Art Unit: 1743

array of reaction mixtures is provided from ^xB stock solution(s) and a kit comprising stock solutions of the chemical substances A_R in bottles, vials, or flasks. Several reactions are performed simultaneously, and the steps of performing preliminary procedures, sorting, reactions, work-up procedures, etc. are performed sequentially per reaction. The reactions may be heated (PAGE 71, line 29-PAGE 72, line 2). Since the containers holding the reaction mixtures are transmissive to microwave frequencies, the reaction is a microwave facilitated chemical reaction (PAGE 53, lines 1-10).

Double Patenting

7. Claim 4 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 3 because claim 4 recites R chemical substances, which has already been defined by claim 1 as more than one, which is recited in claim 3. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Response to Arguments

8. Applicant's remarks filed 2/11/2004 have been fully considered but they are not persuasive since Applicant has not addressed how the amendments overcome the outstanding rejections, which include issues of indefiniteness and patentability over prior art, and objections, which includes duplicate claims. The only amendment from " $\text{R} > 1$ " to " R is a positive integer" clarifies the fact that R has to be a natural number not just any number such as 1.5, 2.2, etc. since one cannot conduct 1.5, 2.2, etc. chemical reactions. This only amendment does not overcome any of the rejections and objections in the Office Action mailed 11/10/2003. The 112 rejections

Art Unit: 1743

dealt with the different issue of clarity regarding the use of symbolism since the meaning of the subscripts and superscripts in the claims is unknown and the use of such appears random.

Additionally, Applicant has not explained how the current claims overcome the rejections based on prior art WO 98/15825 to Nova et al. and/or how the original claims are not anticipated by prior art WO 98/15825 to Nova et al.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Quan whose telephone number is (703) 305-1947. The examiner can normally be reached on M-F (8:00-4:30).


Art Unit: 1743

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (703) 308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Elizabeth Quan
Examiner
Art Unit 1743

eq

A handwritten signature in cursive script, reading "Arlen Soderquist".

ARLEN SODERQUIST
PRIMARY EXAMINER